Claims

What is claimed is:

1. A method for implementing dynamic cosimulation comprising the steps of:

utilizing a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

defining a plurality of user selected optimization control signals over said cosimulation bridge;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

2. A method for implementing dynamic cosimulation as recited in claim 1 further includes the steps of checking whether said identified at least one user selected optimization control signal for disabling said cosimulation bridge remains active; and responsive to said identified at least one user selected optimization control signal being inactive for enabling said cosimulation bridge.

3. A method for implementing dynamic cosimulation as recited in claim 2 further includes the steps of dynamically re-engaging said primary simulator and said secondary simulator for said data exchange responsive to said enabling said cosimulation bridge.

4. A method for implementing dynamic cosimulation as recited in claim 1 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a single sided disable; said single sided disable defining a disable control signal for one of said primary simulator or said secondary simulator.

5. A method for implementing dynamic cosimulation as recited in claim 1 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a two independent disable; said two independent disable defining a respective disable control signal for each of said primary simulator and said secondary simulator.

6. A method for implementing dynamic cosimulation as recited in claim 1 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a functional OR disable; said functional OR disable defining a common disable for both said primary simulator and said secondary simulator; either said primary simulator or said secondary simulator activating a functional OR disable to activate said common disable.

7. A method for implementing dynamic cosimulation as recited in claim 1 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a functional AND disable; said functional AND disable defining a common disable for both said primary simulator and said secondary simulator; both said primary simulator and said secondary simulator activating a functional AND disable to activate said common disable.

8. A method for implementing dynamic cosimulation as recited in claim 1 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a suspend signal for each of said primary simulator and said secondary simulator.

9. Apparatus for implementing dynamic cosimulation comprising:

a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

a plurality of user selected optimization control signals defined over said cosimulation bridge;

a control program for identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and for dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

10. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said control program for identifying said identified at least one user selected optimization control signal being deactivated for enabling said cosimulation bridge and dynamically re-engaging said primary simulator and said secondary simulator for data exchange.

11. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a plurality of disable control signals and a plurality of suspend signals.

12. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a single sided disable; said single sided disable for defining a disable control signal for one of said primary simulator and said secondary simulator.

13. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a two independent disable; said two independent disable for defining a respective disable control signal for each of said primary simulator and said secondary simulator.

14. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a functional OR disable; said functional OR disable for defining a common disable for both said primary simulator and said secondary simulator; said common disable being activated responsive to a functional OR disable control from either said primary simulator or said secondary simulator.

15. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a functional AND disable; said functional AND disable for defining a common disable for both said primary simulator and said secondary simulator; said common disable being activated responsive to a functional AND disable control from both said primary simulator and said secondary simulator.

16. Apparatus for implementing dynamic cosimulation as recited in claim 9 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a suspend signal for defining a respective suspend control signal for each of said primary simulator and said secondary simulator.

17. A computer program product for implementing dynamic cosimulation in a computer system including a cosimulation bridge for data exchange between a primary simulator and a secondary simulator, said computer program product including instructions executed by the computer system to cause the computer system to perform the steps of:

defining a plurality of user selected optimization control signals over said cosimulation bridge;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

18. A computer program product for implementing dynamic cosimulation as recited in claim 17 wherein said instructions further cause the computer system to perform the steps of checking for said identified optimization control signal being inactive and responsive to said identified at least one user selected optimization control signal being inactive for enabling said cosimulation bridge and dynamically re-engaging said primary simulator and said secondary simulator for data exchange.